REMARKS

In the final office action mailed June 23, 2004, the Examiner rejected claims 1, 6-9, 14-17 and 22, and objected to claims 2-5, 10-13, 18-21, 23 and 24. The Examiner also indicated that claims 2-5, 10-13, 18-21, 23 and 24 would be allowable if rewritten in independent form. In response, Applicant cancels claims 2, 10, and 18, amends claims 1, 3, 9, 11, 17, 19 and 23, and adds claims 25-56. As such, claims 1, 3-9, 11-17, and 19-56 are pending.

## *Request For Continued Examination*

This paper is submitted under a request for continued examination (RCE), pursuant to 37 C.F.R. § 1.114. Applicant submits that this response is timely filed, fully responsive to the final office action mailed June 23, 2004, and includes the required fee. Accordingly, Applicant respectfully requests that the Examiner enter the amendments presented herein and consider the remarks below.

## *Interview Summary Record*

The undersigned thanks the Examiner for discussing the bases of the Examiner's rejections in a telephone interview that occurred on August 13, 2004. Although no agreement was reached during that interview, the undersigned appreciated the opportunity to ask questions to clarify the Examiner's position with respect to the teachings of the cited Hamlin reference.

## *Allowable Subject Matter*

The Examiner objected to claims 2-5, 10-13, 18-21, and 23-24 as being dependent upon rejected base claims, but indicated that these claims would be allowable if rewritten in independent form including all of the limitations of their respective base claims and any intervening claims. The Applicant has done so by importing the subject matter of claim 2 into claim 1, claim 10 into claim 9, and claim 18 into claim 17. As such, independent claims 1, 9 and 17 now include subject matter that the Examiner has already indicated to be allowable.

In making the above amendments, Applicant cancels claims 2, 10 and 18, and amends claims 3, 11, 19 and 23-24 to depend from the respective independent claims. Accordingly,

claims 3-8, 11-16, and 19-24 depend, either directly or indirectly, from amended independent claims 1, 9 and 17, respectively. Thus, Applicant respectfully submits that claims 1, 3-9, 11-17, and 19-24 are in condition for allowance.

## *New Claims 25-56*

Applicant has added new claims 25-56. Applicant respectfully submits that these claims introduce no new matter. For example, new claims 25 and 34 find support in the specification at least at page 6, line 10 – page 7, line 9 and in FIG. 3. As another example, new claims 45, 49 and 52 find support in the specification at least at page 11, lines 1-30. Moreover, the specification and figures provide support in addition to the foregoing examples. Applicant respectfully submits that these new claims define patentable subject matter.

With reference to the Hamlin reference cited by the Examiner in prior Office Actions, Applicant respectfully submits that Hamlin does not anticipate any of Applicant's new claims. As a representative example of Applicant's new claims, claim 25 recites a method of allocating a buffer to handle one or more data streams. The method includes determining a buffer size for each data stream based on data rate information associated with the one or more data streams. The method also includes allocating space in the buffer to each of the data streams according to the determined buffer sizes.

Hamlin does not teach or suggest determining a buffer size for each data stream based on data rate information. Instead, Hamlin teaches that the buffer manager algorithm allocates memory in response to conditions of: 1) a data overflow, or 2) a latency exceeding a specified value. As such, Hamlin does not teach allocating space in the buffer memory as recited in Applicant's claims.

Hamlin relates to a disk-based storage system responsive to a direction-selection signal for autonomously controlling seeks in a sequence determined by the direction-selection signal and a locally stored doubly linked list. (Abstract.) The overall system supports the playback of data streams such as audio/visual streams. (Column 6, lines 42-44.) During recording processes, a continuous data stream is divided into a multiplicity of incoming data segments that are temporarily stored in buffer memory. (Column 9, lines 39-41.) Hamlin discloses that preferred

locations for allocating addresses of data segment of data streams on a disk media are determined by particular constraints regarding latency from one data segment to the next. (Column 14, lines 38-48.) Storage locations are selected to have a latency "less than or equal to" a predetermined value ($\alpha$), which is "the maximum allowable latency that may occur between the end of one data segment being transferred to the buffer memory and the beginning of the next data segment." (Column 16, lines 53-60.) Hamlin also teaches "it is preferable to provide dynamic allocation of buffer space " by allocating additional memory when 1) "the amount of data in the buffer ... reaches a predetermined 'high water' value," or 2) "when a latency value a [sic] is exceeded." (Column 17, lines 2-11.)

Accordingly, Hamlin's disclosure does not teach or suggest determining a buffer size for each data stream based on data rate information. Nor does Hamlin's disclosure render Applicant's claims obvious. Indeed, Applicant's claimed invention provides capabilities and advantages that Hamlin's apparatus not only cannot achieve, it provides advantages that Hamlin does not even contemplate. For example, Applicant's claimed dynamic buffer allocation method allows more efficient utilization of the buffer so that the maximum amount of buffer space not needed by the one or more data streams is left available for additional data streams and/or other processes, such as general file accesses, file saves, and the like. (Specification at page 5, lines 25-29.) In contrast, Hamlin does not teach or suggest maximizing the amount of buffer space available for additional data streams or other processes.

## *Conclusion*

Applicant submits that all pending claims 1, 3-9, 11-17, and 19-56 are now in condition for allowance. Accordingly, Applicant respectfully requests that the Examiner issue a timely Notice of Allowance in this case for all of these claims.

Applicant believes that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue, or comment does not signify agreement with or concession of that rejection, issue, or comment. In addition, the arguments made above may not be exhaustive, and there may be reasons for patentability of any or all pending claims (or other

claims) that have not been expressed. Finally, nothing in this paper should be construed as intent to concede any issue with regard to any claim, except as specifically stated in this paper.

Please apply any other charges or credits to deposit account 06-1050.

Respectfully submitted,

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